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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,260	05/25/2001	Kevin Paul Demsky	ROC920000150US1	3637

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EXAMINER	
NGUYEN, CHAU M	
ART UNIT	PAPER NUMBER
2633	4

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/865,260	DEMSKY, KEVIN PAUL	
	Examiner	Art Unit	
	Chau M Nguyen	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to the Paper #3 (Amendment) filed on 25 May 2004.

2. Claims 1, 3-6, 8, 11, 12 and 14-18 have been amended.

3. The rejection in the previous Office Action is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funke (U.S. Pat. No. 4,850,045) view of Ducaroir et al. (Hereinafter " Ducaroir") (U.S. Patent. No. 6,208,621 B1).

As claims 1, 3, 11, 12, and 16-18, Funke discloses apparatus and method for testing a parallel optical hub (transceiver) comprising:

a plurality of connectors (30a-30p, see figs. 1& 2) for connecting in series each of a plurality of channels of said parallel optical transceiver (36/37 represented by dots) including interface circuit as an optical wrap plug (col. 3. lines 30-34);

a serial data generator (61, detailed in fig. 3B) including the steps of generating predefined data pattern utilizing a serial data generator (col. 6, lines 58-60) and for

applying a predefined data pattern to a first channel of said series connected plurality of channels (indicated by arrows in fig. 1) (col. 6, lines 1-14);

a serial data detector (82 and 83, see fig. 3B) for detecting an output from a last channel of said series connected plurality of channels (col. 5, lines 16-18);

Funke does not clearly show the detector for comparing said applied predefined data pattern with said output to identify functional operation of said parallel optical transceiver. However, Ducaroir discloses the comparison process for comparing output test data to input test data (Ducaroir, col. 3. lines 15-24). Since both references relate to the testing process for plurality of transceivers (hubs), therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to perform the comparison between the input test (predefined) data and the output (final) data as taught by Ducaroir into the system of Funke in order to detect the functional operation of transceiver. One would have motivated for doing this since it would be beneficial to have a testing apparatus which reduces the time and costs associated circuit having multiple serial data transceivers (Ducaroir, col. 2, lines 25-32).

As claims 2, 14 and 15, the combination system of Funke and Ducavior as described above, Ducaroir shows connecting a serial of data in series (col. 1, lines 41-49) including electrical wrap plug (see Ducaroir, fig. 1, col. 5, lines 35-37) for electrical connecting a respective channel receiver to corresponding respective channel transmitter; and

respectively optically connecting each respectively channel transmitter to a next respective channel receiver (Ducavior, col. 4, lines 64-67).

As claims 4-7, Ducavior discloses method for testing including the step of detecting output from each receiver – it is inherently including a signal from last receiver (channel) – and comparing the output with the applied test signal to identify correct operation of said transceiver (col. 5, lines 41-47), and

further discloses the step of comparing said applied predefined data pattern with said output to identify operation of said parallel optical transmitter including the steps of comparing said applied predefined data pattern with said output and identifying failed operation said parallel optical transceiver responsive to no match of said of said compared predefined data pattern with said output (col. 3, lines 21-25).

As claim 8, the combination system of Funke and Ducavior discloses method for testing a parallel optical transceiver including the steps of connecting a plurality of parallel optical transceivers in series, as applied in claim 3 above, in that, Ducavior discloses the step of applying a predefined data pattern to a first channel receiver of said series connected plurality of channels includes the steps of applying said predefined data pattern to a first channel receiver of said series connected plurality of channels of a first one of said series connected parallel optical transceivers (Ducavior, col. 2, lines 4-8).

As claims 9 and 10, Ducavior, in the step of comparing said applied predefined data pattern with said output to identifying operation of said parallel optical transceivers, includes the step of comparing said applied predetermined data pattern with said output and identifying a match to identify correction operation (or failed operation) of said series connected parallel optical transceivers responsive to match (no match) of said compared predefined data pattern with said output (col. 3, lines 21-24 and col. 5, lines 42-47).

As claim 13, Kunke discloses optical interfaces (30a-30p) (as wrap plug) for respectively optically connecting each respective channel transmitter to a next respective channel receiver (col. 3. lines 30-34);

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ewen et al. (U.S. Pat. No. 6, 7,35,731 B2) is cited to show architecture for built-in self-test of parallel optical transceivers.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau M. Nguyen whose telephone number is 703-305-8965. The examiner can normally be reached on Mon-Fri from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 703-305-4726. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

C.M.N.
Aug. 10, 2004

JASON CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600